

Amendments to the Specification:

Please amend paragraphs 25-30 of the specification as follows:

[0025] FIG. 1A provides a schematic representation of an exemplary integral membrane protein 2. This protein includes an extracellular domain (10), a transmembrane domain (12, shown embedded in cell membrane (13)) and an intracellular domain (14). The extracellular domain is composed of an extracellular loop (11). The transmembrane domain is composed of two helical strands (31 and 33), each of which spans the membrane (13). The intracellular domain is composed of an N-terminal strand (16) and a C-terminal strand (30). [[:]]

[0026] FIG. 1B provides a schematic representation of a scaffolded fusion polypeptide 4 of the invention designed from the integral membrane protein of FIG. 1A[[:]]. Scaffolded fusion polypeptide 4 comprises an extracellular domain (ECD, 10'), a scaffold domain (15) and an intracellular domain (14'). The extracellular domain is composed of a functional domain (11') and the intracellular domain is composed of an N-terminal strand (16') and a C-terminal strand (30'). The scaffold domain is composed of a first scaffold strand (54) and a second scaffold strand (56). The scaffold domain also includes a zinc ion (50), which is coordinated with the first and second scaffold strands (54 and 56).

[0027] FIG. 1C provides a schematic representation of a typical 7-transmembrane protein 8 [[:]]. Transmembrane protein 8 comprises an extracellular domain (10), a transmembrane domain (12), and an intracellular domain (14). The extracellular domain comprises three loops (18, 20 and 22) and a terminal strand (16). The intracellular domain comprises three loops (24, 26 and 28) and a terminal strand (30). The transmembrane domain comprises seven strands (31, 33, 35, 37, 39, 41 and 43) that traverse the cell membrane (13).

[0028] FIG. 1D provides a schematic representation of a scaffolded fusion polypeptide 9 designed from the extracellular domain of the 7-transmembrane protein of FIG. 1C[[:]]. Polymeric scaffolded fusion polypeptide 9 comprises three modules (70, 72 and 74), each of which is conceptually similar to the scaffolded fusion polypeptide illustrated in FIG. 1B. Functional domain 18' and the first and second scaffold strands (58 and 60) together compose the first module (70). Functional domain 20' and the third and

fourth scaffold strands (54 and 56) together compose the second module (72). Functional domain 22' and the fifth and sixth scaffold strands (62 and 64) together compose the third module (74). Extracellular domain (ECD) 10' (or, alternatively intracellular domain, ICD) of polymeric scaffolded fusion polypeptide 9 comprises three functional domains (18', 20' and 22') and a terminal strand (16'). Functional domains 18', 20' and 22' are each held in place by a scaffold domain (51, 15 and 55, respectively) which includes a zinc ion (50). Modules 70, 72 and 74 are linked serially together via linkers (52). Terminal strand 16', is linked to module 70 via a linker (53). Polymeric scaffolded fusion polypeptide 9 additionally includes terminal strand 30'.

[0029] FIG. 1E provides a schematic representation of artificial receptor 8' according to the present invention. Artificial receptor 8' is similar to the scaffolded fusion polypeptide 9 of FIG. 1D except that linkers 52 and 53 of the scaffolded fusion polypeptide 9 correspond to functional domains 24', 26' and 28' of the artificial receptor 8' of FIG 1E.

[0030] FIG. 2 provides a schematic representation of a typical zinc finger polypeptide motif. A zinc finger domain comprises two strands (80 and 82) that together chelate a zinc ion (50). Strand 80 includes two cystidine (C) residues that coordinate the zinc ion, and strand 82 comprises two histidine (H) residues that also coordinate the zinc ion.